

Work Order ID 133929

Tuesday, June 23, 2015 3:15:14 PM

133929

Page 1

Item ID: D2893-1

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Support

Start Date: 6/23/15

Start Qty: 10.00

10

Cust Item ID:

Required Date: 6/23/15

Req'd Qty: 10.00

10

Customer:

Reference:

Approvals:

Process Plan: MLS

Date: JUN 24 2015

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2893	C

100

0.01

100

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.09

HAAS CNC vertical machine #1

1-Machine as per Folio FA081
2-Deburr

DAS

44

9-89

15/07/09

DAS

20

9-89

15-07-11

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DAS

44

9-89

15/07/09

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

DAS

44

9-89

15/07/16

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																								
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Page 2

Item ID: D2893-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Support
 Start Date: 6/23/15 Start Qty: 10.00 ***10*** Cust Item ID:
 Required Date: 6/23/15 Req'd Qty: 10.00 ***10*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							DAS 41 9-89
130		0.00				10			15-7-22
HandFXtube	Memo								
Hand Finishing Crosstubes	Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24h of cure time.	132391							
140	QC3- Inspect Part Finish	0.00							DAS 38 9-89
140		0.00				10			
QC	Memo								
Quality Control									JUL 23 2015
170	Identify as per dwg & Stock Location: LG051	0.00							DAS 27 9-89
170		0.00				10			JUL 27 2015
Packaging	Memo								
Packaging	LOCATION : LG052								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.02							
Quality Control									

SD **20150727***15/7/27*

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Picklist Print

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Page 1

Work Order ID: 133929

133929

Parent Item: D2893-1

D2893-1

Parent Item Name: Support

Start Date: 6/23/15

Required Date: 6/23/15

Start Qty: 10.00

Required Qty: 10.00

Comments:

IPP: C02.11.26Reformat; Added P/OKJ

IPP D 06.04.19 removed alodine EC

IPP Rev:E Added priming as per Rev B 07-04-30 JLM

IPP F 08.03.19 Re-format EC verified by: DD

IPP Rev:G 08-05-15 add QC14 DD verified by:EC

IPP Rev:H

11.08.04 as per dwg rev.C DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078		Manufactured	No			100	Each	11.0000	0.5	6		DAS	
DSK078									**	5		20	15-07-08
D2893-1 Turning Detail												9-89	

Location

Loc Qty

Loc Code

MAT060

11

128465

3

129637

4

130615

4

3

2

DQA: _____ Date: _____

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DART AEROSPACE LTD		Work Order: 133929
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.995	2.994	2.993	2.990	2.992
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.136	.138	.138	.138	.138
AD	0.040	0.060		.051	.051	.051	.050	.050
AE	0.188	0.193		.188	.188	.188	.188	.188
AF	0.125	0.160		.137	.138	.137	.139	.139
AG	0.140	0.160		.149	.152	.150	.150	.149
AH	1.360	1.400		1.380	1.383	1.378	1.380	1.380
AI	0.040	0.060		.050	.046	.049	.050	.046
AJ	1.190	1.230		1.226	1.222	1.220	1.223	1.220
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.533	2.536	2.533	2.534	2.533
AO	84.39	90.39		84.39	84.39	84.39	84.39	84.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject				✓	✓	✓	✓	✓

Measured by: F.K. **Date:** 15/07/09

Audited by: [Signature] **Date:** 15/07/16

Preliminary Approval: **Date:**

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	[Signature]

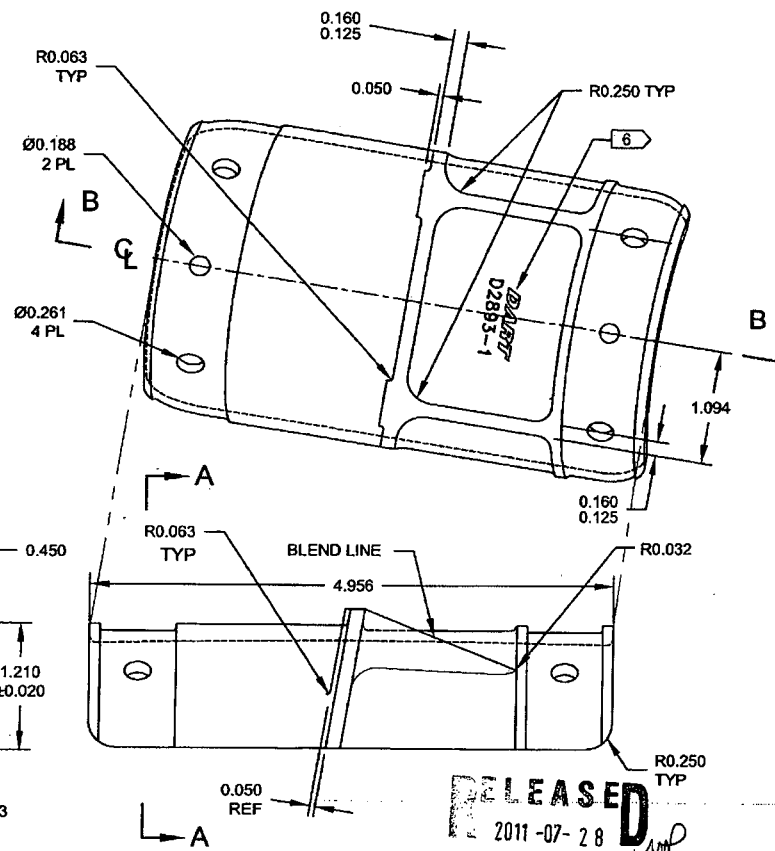
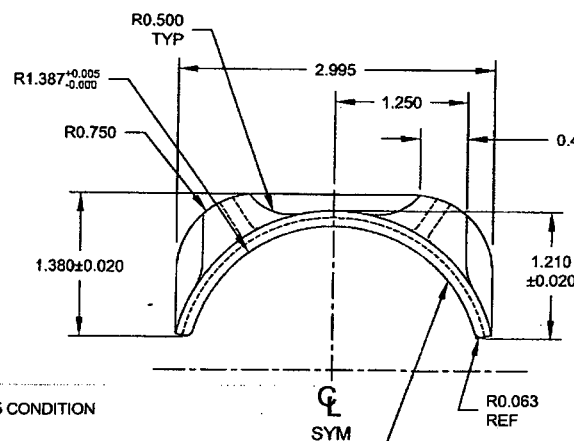
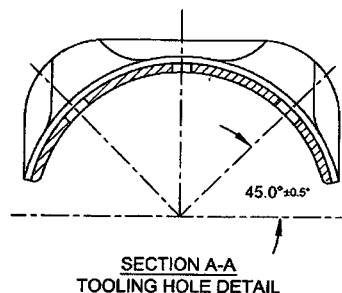
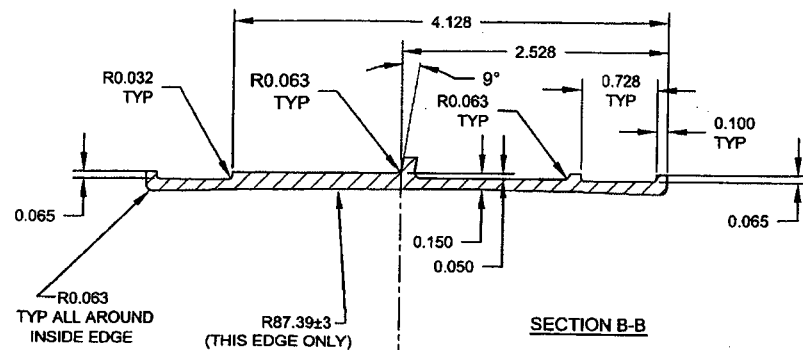
DART AEROSPACE LTD		Work Order:	133929
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	6	7	8	9	10
HAAS Section								
AA	2.985	3.005		2.991	2.989	2.990	2.985	2.987
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.137	.136	.137	.135	.135
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.188	.188	.188	.188	.188
AF	0.125	0.160		.140	.137	.140	.135	.135
AG	0.140	0.160		.150	.149	.147	.148	.150
AH	1.360	1.400		1.379	1.382	1.381	1.379	1.377
AI	0.040	0.060		.054	.047	.048	.051	.051
AJ	1.190	1.230		1.227	1.223	1.222	1.225	1.223
AK	0.010	0.020		.015	.015	.015	.015	.015
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.536	2.536	2.530	2.530
AO	84.39	90.39		84.39	84.39	84.39	87.39	87.39
AP	0.261	0.266		.262	.262	.262	.262	.262
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject				✓	✓	✓		

Measured by:	FK / DAS 20 9-89	Date:	15-07-11
Audited by:	MR	Date:	15/07/16
Preliminary Approval:		Date:	

Rev	Date	Change	Revised by	Approved
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B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	



NOTES:

1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION
MIN UTS = 170 KSI (38 HRc)
(REF DART SPEC. D8104)

2) FINISH: NONE

3) TOLERANCES: PER DART QSI 018 (REF X.XXX = ±0.010) UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING
0.010-0.020 DEEP, PER DART QSI 044 6.3.

7) WEIGHT: 0.78 lb

8) FOR THE ENTIRE INNER CONCAVE SURFACE:
ABRADE SURFACE WITH 400-GRIT SANDPAPER, REMOVE RESIDUE WITH MEK (OR EQUIVALENT), APPLY 0.03" TO 0.05" THICK LAYER OF 3M SCOTCH-WELD 2216 B/A ADHESIVE TO MATING SURFACE OF SUPPORT. ALLOW TO CURE FOR 24 HOURS.

D2893-1 SUPPORT

3M SCOTCH-WELD 2216 B/A
EPOXY ADHESIVE
0.03" - 0.05" THICK
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO CHANGE
WITHOUT NOTICE
BY ORDER
133929 ML5

REV.	DESCRIPTION	BY	DATE
C	RMV FINISH, ADD 3M 2216, ADD H925 MAT'L OPTION	CP	11.07.15
B	UPDATE DIMS AS MFG, PRIME INSIDE	PH	07.03.16
A	NEW ISSUE	CP	01.01.10
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.07.15		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D2893	REV. C SHEET 1 OF 1
TITLE Ø2.750 SUPPORT	SCALE NTS
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2011-07-28